Executive Summary

This panel discussion was a part of a programme ‘From Incubation to Enterprise’ which was conducted by Indian Institute of Management, Ahmedabad’s (IIMA) Centre for Innovation, Incubation, and Entrepreneurship (CIIE) on January 4, 2003. Professor Pankaj Chandra of IIMA led the discussion. The distinguished panelists were Mr. Sandeep Srivastav and Professor Bipin Shah. Their experience and insight on the subject helped in understanding the process of incubation leading to enterprise.

The panel discussion addressed the following questions:

- What is incubation?
- What is innovation?
- What is the process of incubation that is needed for commercializing an innovation?
- What role does an incubator play?

The following important points were made by the panelists:

- An innovative entrepreneur should adapt to the demand of the market. The adaptation may be with regard to technology, marketing, business idea or business plan.
- The concept of incubation originated from the medical field.
- The concept of incubators is applied more to project ideas which have a high degree of uncertainty. The aim of the incubators is to facilitate the survival of such companies and also to nurture these companies for growth and success.
- Incubators play the role of risk-sharing and providing credibility to an idea as it progresses from being an idea to some kind of product. It minimizes uncertainty and increases the success rate of an enterprise that is at a very nascent stage.
- The difference among promotional efforts and hand-holding is that promotional effort is the assistance given for setting up a business whereas, in an incubator, it is more of hand-holding.
- The biggest benefit of being in an incubator is that it insulates you from the outside environment and hence an innovator can just concentrate on getting his idea fool-proof for the market.
- Incubators even provide the network, linking the innovators with societal resources. The network is of two kinds — knowledge network and social network.
- The role of venture capitalists in enterprise building is to provide linkages for a budding entrepreneur. But not many people are ready to give money at an idea level.

Professor Pankaj Chandra concluded the discussion by saying that the incubator is not just for supporting the innovator but also for ensuring that the idea is converted into an enterprise.
**Pankaj Chandra:** Welcome to this panel discussion on Innovation, Incubation, and Incubator. I have two panelists with me—Mr Sandeep Srivastav, an alumnus of IIT, Mumbai, founder and CEO of Myzus and Mr Bipin Shah, a senior faculty at Entrepreneurship Development Institute, Ahmedabad. Mr Shah has about 28 years of experience in the field of industry, management, consultancy, and entrepreneurship. He has done B.Sc.in Chemistry and MBA from BITS, Pilani, and has worked with a number of organizations including GITC, ICICI, and IDBI. I am pleased to have both of you here on the panel.

The reason for this panel discussion is to learn from the experiences of our two colleagues and also to understand better the process of innovation and incubation. We have established an incubator at Indian Institute of Management, Ahmedabad (IIMA) with a slightly different kind of perspective and principles than what many incubators that exist today have. Unlike many incubators around the world that focus on pure entrepreneurship, we decided to focus on entrepreneurial activities that would revolve around an innovation. But it is very difficult to define what comprises innovation versus what does not. Does innovation mean a new product, a new process, a breakthrough or continuous improvement or an improvement in managerial practices? What is this innovation chain around which our entrepreneurial activities should be developed? And what is the process of incubation that an entrepreneur “must go through” to commercialize the innovation? I am sure we could not have found two better people than the ones we have here to share with us about what, according to them, comprises innovation. Having gone through the extensive process of starting an enterprise successfully as Mr Srivastav has done or launching and assisting many of them as in the case of Mr Shah, what should be this process of incubation that an entrepreneur should go through? How should an innovation be incubated so that it becomes an enterprise?

**Sandeep Srivastav:** We need to be specific regarding the kind of innovation we are talking about. Is it just technological innovation or is it an innovation in marketing, a business idea or a business plan? In my opinion, being an entrepreneur means adapting oneself to the demand or the need of the moment. Ideally, an incubation facility should be so designed that it facilitates innovation during the process of starting a business.

**Bipin Shah:** I heard the word incubator for the first time two decades ago when one of my friend’s children was born premature. The child was placed in an ‘incubator’ because s/he was premature and hence would not be in a position to withstand or live in a normal environment, the way a normal healthy child would. Therefore, till such time s/he becomes capable of living in a normal environment, the child would be kept in an incubator. The incubator has a simulated environment and monitors the life systems so that the child comes to a stage from where it can be nurtured and brought up like a normal child.

In the late 80s when I was in GITCO, the concept of business incubators started. The Department of Science and Technology started to promote business incubators. The lead was at that time taken by one of our sister organizations, the Maharashtra Technical Consultancy Organization. This business incubator had infrastructure facilities as well as the expertise available within the organization. This was made available to five budding entrepreneurs who on their own, probably, could not take up the process of setting up an enterprise. Simple things like photocopying unit were provided. We are talking about the incubator as a process between innovation and entrepreneurship. Now we have come a long way from the simple concept of providing basic facilities to nurturing the process of entrepreneurship and enterprise creation. The question that arises is, do all new enterprises or all new entrepreneurial ideas need incubation? I would presume that the answer is probably ‘no.’ If that was the case, then no enterprise creation could have taken place without incubation. Therefore, we must clearly understand that the need for incubation facility is only in relation to certain specific conditions and requirements of the enterprise.

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**Does innovation mean a new product, a new process, a breakthrough or continuous improvement or an improvement in managerial practices? What is this innovation chain around which our entrepreneurial activities should be developed? And what is the process of incubation that an entrepreneur “must go through” to commercialize the innovation?**
What one would consider as innovation relates not only to the question of doing new things but also a question of doing things in a new manner. Even this approach, that is doing things in a different way, requires a considerable amount of support in terms of incubation facilities.

The business incubator concept is more applicable to project and product ideas that have a high degree of uncertainty with regard to success. Venture capital companies are said to promote new ideas, innovative projects, and concepts and are supposed to be more enthusiastic than the commercial bank. The experiences of venture capitalists and venture capital companies indicate that the proposals that are rejected are in excess of 90 to 95 per cent. In this scenario, where new projects or innovative ideas or concepts have a high rejection rate, the concept of creating incubation facilities which are aimed at facilitating the success and survival and later on the growth of such enterprises is considered a necessity.

Pune has the largest private entrepreneur-promoted incubator in the country with 31 enterprises and an investment of Rs 50 million. Nearly 90 per cent of these enterprises are technology-related and are undergoing the process of enterprise development at this incubator. This incubator is barely 20 months old. While it is premature to say what will be the future of these 31 enterprises, the person who floated this incubator hopes that even if after five years there is a success rate of less than 10 per cent, he would be making around 50 times more than what he had invested in this business incubator. Here, the business incubator becomes an enterprise in itself. While I was studying the profile of these companies as to why and what kinds of people join business incubators, I found out that setting up an enterprise without an incubator facility could be a difficult task, that is, looking at the business plan, legal aspects, dealing with the external environment, creating physical facilities, etc. There are a couple of companies that are promoted by technocrats with the sole objective of developing new products. They have the technology, the know-how. This brings us to what these business incubators would do and how they would really promote and facilitate the growth of such companies. The incubator provides all these facilities and the entrepreneur takes care of the main business of developing a product and converting it into a sustainable commercial venture. Interestingly, of the 31 companies, there are two companies that have already started making profits within a span of 18 months. But the concepts that they are dealing with are not entirely new for our country. A thing may be new here but it may not be new elsewhere. Hence I would not say that innovation is akin to invention. We must segregate invention and innovation.

There are other models of incubators besides business incubators and the private sector incubators. A non-business organization incubators or educational institution incubators are not for profit. They have a different kind of objective, i.e., promoting an enterprise and facilitating the implementation of the process of creating an enterprise. However, an important question that we must address is: where does one look for innovative ideas or what are the resources of product innovation so that these incubators could promote support? A business incubator could play a great role in facilitating and helping innovators to become successful entrepreneurs.

Sandeep Srivastav: I would like to respond to the question that Mr. Shah raised regarding where one looks for innovation related to product. There are certain key points which a person should benchmark against while looking for ideas. The criteria that we adopted at Myzus were: it should be helpful to the people; it should save their time; it should be adding to their convenience; it should be cost effective if it had to be sold in the market; and it should definitely improve the quality of life.
the other one at IIT, Mumbai and both of them were of a different kind. One was related to an educational institute like IIT, Mumbai where the perspective of the organization was to help nurture an idea that is in a student’s mind, commercialize the idea, and take it to the world. The second incubator was a professional one being run by EDB and the experience there was totally different from the institute one.

**Pankaj Chandra:** There are a variety of incubators that have been in existence around the world. It seems that incubators focus on certain part of the life cycle of an idea. You have an institutional incubator like the one at IIT that helps to focus on conceptualizing an idea into some kind of a product idea. Then we have other agencies that help you to take this product idea into a prototype form and then there are others who take prototypes and convert them into products for the market. Such incubators have existed in North America for quite some time. There are also experiences from South East Asia like Taiwan where a number of incubators are associated with Science and Technology institutions. The role of many incubators has been to create some kind of a forum whereby science and technology researchers as well as students and entrepreneurs come together to create an enterprise or create value out of their own efforts. The part that incubators associated with academic institutions can play is one of testing ideas. They can also share risks, funnel expertise, and provide credibility to an effort. They can furnish research on potential markets or/and prepare operational plans that could minimize the likelihood of failure of the effort. These are a variety of roles that an incubator plays. The process of incubation provides inputs that can help the innovator overcome uncertainty in these activities. And this is where the concept of ‘technology network’ comes into play. Here the linkages like those with the venture capitalists, legal aid, and those who can provide commercial expertise to the entrepreneur or to the innovator start to add a lot of value to the effort. If it is not organized well, such assistance could tie up the innovator on such activities and take him away from the innovative activity for which he is devoting his life. An incubator associated with management institutions, like IIMA, can provide opportunities in a formal way where people can learn how to write a business plan or do market research. Without penalizing them as far as their innovative activity is concerned, they get to learn the nuances of managing people, of setting up an enterprise, of manufacturing and planning or even interacting with the government in order to establish an enterprise. So if you look at the role of incubators, it is meant to minimize uncertainty in the starting process. Hence, the success rate of an enterprise which is at a very nascent stage increases.

**A Participant:** Do all enterprises require incubation facility?

**Bipin Shah:** One must keep in mind that an incubation facility is required because the degree of uncertainty is high. Here you have the facility where you can try out your ideas and concentrate on your innovation. Many a times, the process of commercialization is known clearly and the idea gets implemented without any incubator. You know the degree of uncertainty is less because the process is known. One must keep in mind that there is a fine distinction between promotional efforts, hand-holding, and handing over. These are the three things I want to share my views on. Promotional effort is the assistance that you give to the business for setting it up. People talk about single windows or extension bureau in which they provide everything under one roof. They show the plot, give a telephone connection, arrange for utilities, pay for the children’s education, etc. All these an incubator can facilitate. Similarly, with hand-holding, which is to reduce the impact of uncertainty. However, if you keep the hand-holding process longer than required, you convert the innovator into a dependent. So, while support for a certain time is required, at the end of the day, it is the entrepreneur who has to make business decisions and take business risks.

**Sandeep Srivastav:** One of the biggest benefits of being a part of an incubator is that it insulates you from the word ‘environment.’ You just get to concentrate on getting your idea fool-proof and establish the market network. Now, there are different kinds of incubators for people with different profiles. As a student, I think the first kind of incubator that we get to experience is the academic environment.
institution itself. The second kind of incubator is those supported by organizations like Microsoft or Intel. They promote their own employees to spin off an idea, do the proofing, and go and attack the market. If the idea is successful, the company goes ahead and acquires it giving the founders a return on their innovation. There are certain venture capitalists and angel investors who run incubators themselves. They put ten eggs in the basket and wait for one to hatch. If one of them hatches, they just pick it up and fund it fully, otherwise, they just let it go away. Companies like Infosys and Wipro have internal incubators now. They encourage innovation amongst their employees. Employees who have innovative ideas on telecommunication or PC manufacturing, can start on their own. These companies fund them and, as the idea progresses, the company itself diversifies and adopts it as part of its own organization. It really depends on the kind of incubation that one needs.

Ideally, an entrepreneur may have ideas that might not require any kind of incubation but then they have to be backed by a certain degree of experience derived from others if not from incubators.

**Pankaj Chandra:** One more thing that the incubators provide you is a ‘network.’ The biggest strength of being in an incubator vis-à-vis being on your own would be that it links you with a large number of resources in the society. This is how better incubators have gained and their success rates are much higher. They provide good science and technology input, good managerial expertise, and, at the end, good linkages with venture capitalists and others. The management of these linkages is what the incubator brings on the table for an innovator.

As a founder or as an entrepreneur, you have to be ready to take certain amount of risk. There has to be some kind of backing from somewhere. For example, your family should be able to provide you strong morale support and you should be ready to take up risks. The incubator is not going to provide you risk diversification. May be, after you have done the idea proofing, you can go ahead and secure some kind of funding which will help you to be in a safe position for sometime. IIT, Mumbai, has a certain amount of funding tied up for companies that participate in incubation activity. But, as an entrepreneur, you have to be ready to take certain amount of risk. Perhaps, a part of it can be diversified. Life would not be as simple as working in a job. It is bound to be difficult.

There are two issues worth considering in this regard: one is the knowledge network and the other is the social network. Many a times, an innovator may not be able to leave the home base to come to an incubator. And, as a result, there must be a mechanism through which the incubator should provide such an innovator with service even at a distance. Family provides support and there may exist social networks that may facilitate the communication process that the innovator may lose once he/she goes to another town to join an incubator. There are incubators now which are starting to help through ‘distance clinics.’

As far as an incubator is concerned, it follows a process: There is an evaluation process whereby the technology gets evaluated including its marketability in terms of potential customers. Once the technical and market feasibility is established, the innovator joins an incubator and the incubator invests resources for the development of the product and its commercialization. This could be around a half to one million rupees over a period of two years, both in terms of funds as well as support services. For instance, you have a prototype that needs a design input. What the incubator does is hand-holding that Mr Shah was talking about. And it is here that the incubator puts in its resources. It takes you to a design centre to find if that can provide such a support. It provides the consulting fees for the design centre. Suppose this is a product that needs testing at an electronics laboratory. The incubator gets its tested, gets the specification established, and the market research done by its internal researchers. In our case, at IIMA, we have a very strong network of students who are very good at many of these kinds of activities. These activities provide training to the students on the one hand and services at no cost to the innovator, on the other hand. Then comes the venture capitalist. In fact, a good venture capitalist has a network of many companies that he has essentially funded or has links with. He provides these linkages to the innovator. So, what a good venture...
capitalist says is, “I am investing money in you to get you into the first level of enterprise building. I want you to succeed, hence I need to make sure that you have some plans or you have some customers.”

This hand-holding happens all across the technology supply chain before your prototype comes into the market as a product. But, the risk of failure is there. The hand-holding is helping to reduce this risk. In fact, one of the things we would like to do is to provide space to innovators and their families to come and stay. We do not want to pull them out from their social network. We must be able to provide inputs in the social environment where the innovator is innovating. Not everybody is ready to leave the job in order to join an incubator. We will have to evolve a new model of incubation for our environment.

When you say that you are an entrepreneur, then, the first essential value of entrepreneurship is your risk-taking ability. The second thing is that it is not a blind risk but a calculated one. The incubation centre certainly will not give you solution for that but if you have a novel idea, it will help you develop it. This business incubator concept is probably seven or ten years old. But innovations have been made and converted into business since ages. Therefore, one must understand that, for those kinds of ideas, it is good that incubation facilities have been created so that one can concentrate on the main business idea and develop it for commercial purpose. Private sector incubators not only provide physical infrastructure but even seed money. They do the accounts, help with the legal work, and also provide for the testing facility in order to identify the customer to whom you can show the demonstration of your product when it reaches the data stage. In lieu of that, you pay a certain fee per month. The incubation idea is not for mass replacement of entrepreneurial function or anything like simple marketing or dealing with the environment or with the bank. The incubator concept is not meant to take over the entrepreneurial role and if that were the case I think there will be nothing left to entrepreneurship.

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**A Participant:** What we have realized from our experience in the past is that if you have money, you can make things happen anywhere. Take the example of Reliance Infocom. Earlier, their plan was to launch the mobile service sometime in June. After the death of Mr Dhirubhai Ambani, they decided to launch it in December. They put pressure on their workers, negotiated with all the vendors, brought the rates down by 70 per cent, and they delivered it by December. They had the negotiation power because they had money.

**Sandeep Srivastav:** Business environment leading to a successful enterprise has become rather complex with a very large number of activities. If one goes ahead beginning with a simple idea, the journey is very difficult. Perhaps, we have to have incubation facilities in stages. The need for an incubation centre has arisen because modern business environment has become rather complex. We now have a large number of consumers, products, designers, technology institutes, management institutions, and business systems to help people do business also. But, only the incubation centre takes up those ideas that have the capacity of maturing into business and enterprises.

**Pankaj Chandra:** The innovator need not become an entrepreneur. Incubators are meant to provide linkage between people who can convert and develop enterprises and people who can constantly innovate. The objective is that the incubator not only supports innovation but also helps it to be converted into an enterprise, because, at the end of the day, the enterprise will generate employment for growth and betterment of the society. Many innovation-based enterprises stagnate because they are not able to come up with another set of innovations as their enterprise develops. On the other hand, the innovator should not be completely burdened with enterprise-building always because his skills are somewhere else. Providing managerial skills along with technical skills will increase the probability of success of startups.